

Claims

- [c1] 1. A method of compressing XML documents, the method comprising: compressing a first XML document into a binary stream; converting the binary stream into a compressed valid XML document; and associating at least one XML tag with the compressed valid XML document, wherein the XML tag identifies the document as a compressed XML document.
- [c2] 2. The method of claim 1, wherein compressing the first XML document into a binary stream includes compressing the XML document using a deflate compression algorithm.
- [c3] 3. The method of claim 1, wherein converting the binary stream into the compressed valid XML document includes converting the binary stream to ASCII text using base-64 encoding.
- [c4] 4. The method of claim 1, wherein converting the binary stream into the compressed valid XML document includes replacing invalid XML characters with standard XML replacement text.
- [c5] 5. The method of claim 1, wherein the first XML document includes a configuration file to configure a remote device.
- [c6] 6. A method of transferring XML documents, the method further comprising: compressing a first XML document into a binary stream; converting the binary stream into a compressed valid XML document; transferring the compressed valid XML document over a network; reconverting the compressed valid XML document into a binary stream; and decompressing the binary stream to obtain the first XML document.
- [c7] 7. The method of claim 6, wherein converting the binary stream into a

compressed valid XML document includes associating at least one XML tag with the compressed valid XML document, wherein the XML tag identifies the document as a compressed XML document.

- [c8] 8. The method of claim 6, wherein reconverting the compressed valid XML document into a binary stream includes reconverting standard XML replacement text back to original characters.
- [c9] 9. The method of claim 6, wherein transferring the compressed valid XML document over a network includes transferring the compressed valid XML document over a serial communications network.
- [c10] 10. The method of claim 6, wherein transferring the compressed XML document over a network includes transferring the compressed valid XML document over a wireless network.
- [c11] 11. The method of claim 6, wherein transferring the compressed XML document over a network includes transferring the compressed valid XML document over the internet.
- [c12] 12. A computer readable medium to implement a method of compressing XML documents, the computer readable medium comprising program code for: compressing an XML document into a binary stream; converting the binary stream into a compressed valid XML document; and associating at least one XML tag with the compressed valid XML document, wherein the XML tag identifies the document as a compressed XML document.
- [c13] 13. The computer readable medium of claim 12, wherein the computer readable medium further includes program code for: reconverting the compressed valid XML document into a binary stream; and

decompressing the binary stream into an XML document.

- [c14] 14. The computer readable medium of claim 12, wherein the program code includes a deflate compression algorithm.
- [c15] 15. The computer readable medium of claim 12, wherein the program code includes a binary to ASCII text encoding algorithm.
- [c16] 16. A network device comprising: at least one processor; a network interface to communicate with the at least one processor and a network; and an XML document processing module, including a compression module to compress XML documents into compressed valid XML documents.
- [c17] 17. The network device of claim 16, wherein the XML document processing module includes a deflate compression algorithm.
- [c18] 18. The network device of claim 17, wherein the XML document processing module includes a binary to ASCII text encoding algorithm.
- [c19] 19. The network device of claim 18, wherein the binary to ASCII text encoding algorithm includes a base-64 encoding algorithm.
- [c20] 20. The network device of claim 16, wherein the XML document processing module includes a decompression module to decompress compressed valid XML documents.
- [c21] 21. The network device of claim 16, wherein the network device is an embedded device server operable to manage a remote device using XML documents.
- [c22] 22. The network device of claim 16, wherein the network interface includes a serial port.

- [c23] 23. The network device of claim 16, wherein the network interface includes a web interface.
- [c24] 24. The network device of claim 16, wherein the network is a wireless network.
- [c25] 25. The network device of claim 24 wherein the network device is included in a cell phone.
- [c26] 26. The network device of claim 24 wherein the network is a wireless local area network (WLAN) and the network device is included in a WLAN computer card.
- [c27] 27. A method for transmitting XML documents, the method comprising: compressing a first XML document into a binary stream; converting the binary stream into a compressed valid XML document; associating at least one XML tag with the compressed valid XML document, wherein the XML tag identifies the document as a compressed XML document; transferring the compressed valid XML document over a network; recognizing the transferred document as a compressed valid XML document; reconverting the compressed valid XML document into a binary stream; and decompressing the binary stream to obtain the first XML document.
- [c28] 28. The method of claim 27, wherein reconverting the compressed valid XML document into a binary stream includes reverse base-64 encoding.
- [c29] 29. The method of claim 28, wherein decompressing the binary stream includes running a reverse deflate algorithm.
- [c30] 30. The method of claim 29, wherein transferring over a network includes transferring over the internet.

[c31] 31. A system for communicating XML documents, the system comprising: a communication network; and at least first and second network devices to communicate over the network, wherein each network device includes: at least one processor; a network interface to communicate with the at least one processor and the network; and an XML document processing module, wherein the XML document processing module includes: a compression module to compress XML documents into compressed valid XML documents; and a decompression module to decompress compressed valid XML documents.

[c32] 32. The system of claim 31, wherein the first network device is an embedded device server, the first network device operable to receive a device configuration file as a compressed valid XML document and decompress the document.

[c33] 33. The system of claim 31, wherein the first network device is operable to transfer a status message as a compressed valid XML document to the second network device.

[c34] 34. The system of claim 31, wherein the network is a serial communication network.

[c35] 35. The system of claim 31, wherein the network is a wireless communication network.